



STRUCTURAL  
CHEMISTRY

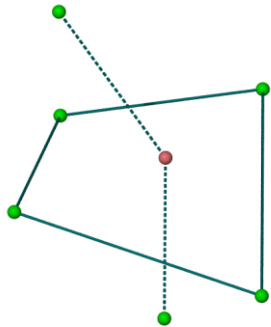
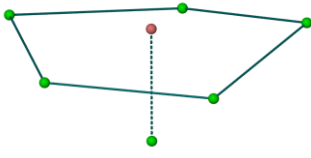
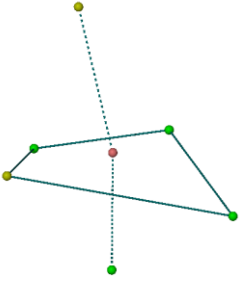
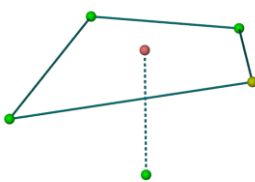
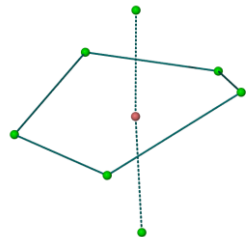
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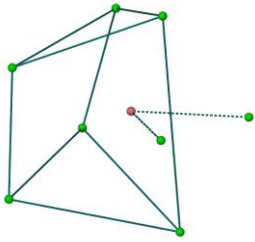
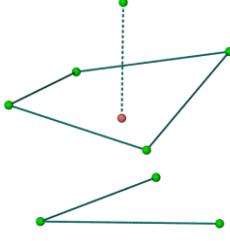
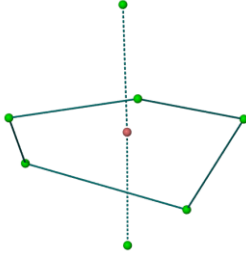
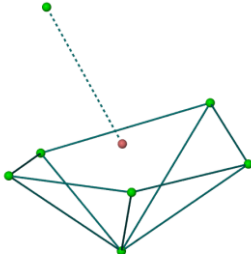
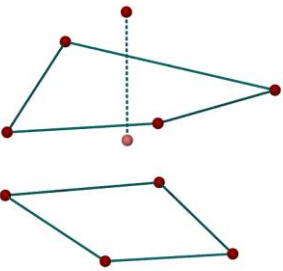
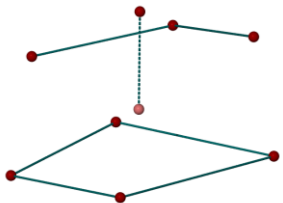
**Supporting information for article:**

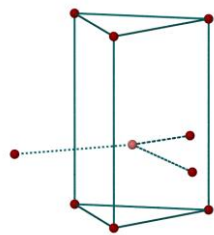
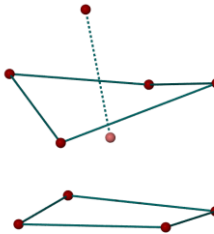
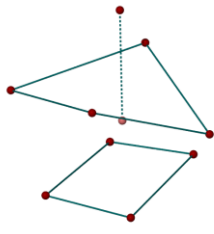
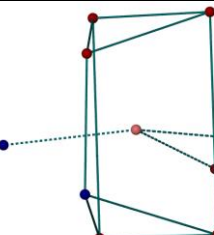
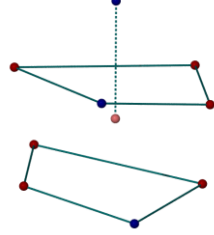
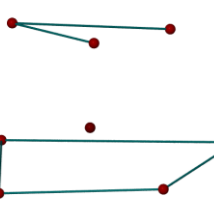
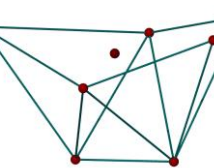
**Resolvable polymorphism in an intergrowth of two modifications of  
tris(diethyldithiocarbamato)antimony**

**Seik Weng Ng**

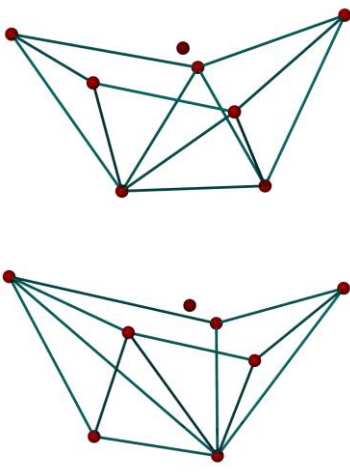
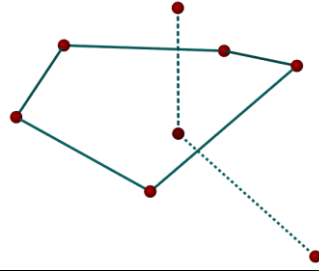
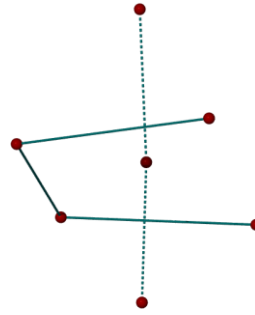
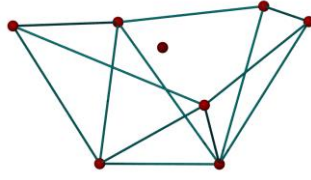
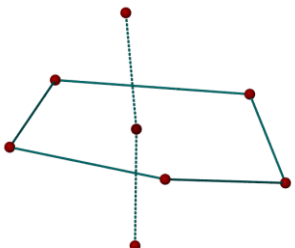
**Table S1. Polyhedral symbols for coordination geometries for pairs of Sb(III), Bi(III) and Pb(II) polymorphs**

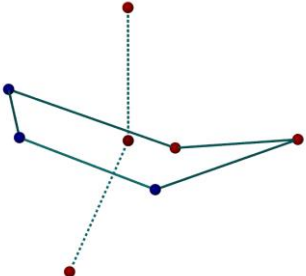
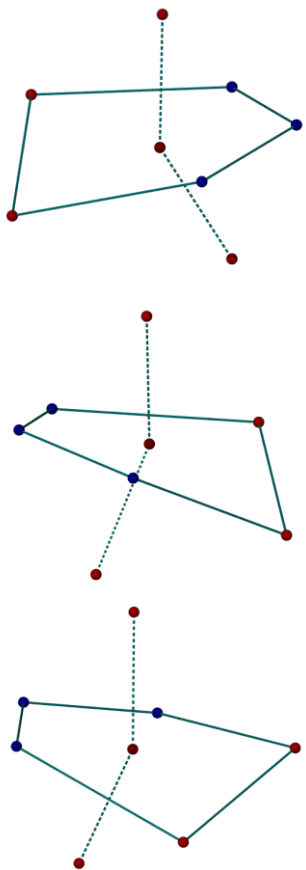
Formula	Space group	Polyhedron	Polyhedral symbol	Reference
$\text{Sb}(\text{S}_2\text{CNMe}_2)_3$	$P-1$		$\psi\text{-OFC-7}$	This work
$\text{Sb}(\text{S}_2\text{CNMe}_2)_3$	$P2_1/c$		$\psi\text{-PBPY-7}$	This work; Que <i>et al.</i> , 2009; Raston & White, 1976
$\text{SbCl}(\text{S}_2\text{CNMe}_2)_2$	$P2_1/c$		$\psi\text{-OFC-7}$	Ozturk <i>et al.</i> , 2014
$\text{SbCl}(\text{S}_2\text{CNMe}_2)_2$	$P2_1/c$		$\psi\text{-OC-6}$	Ozturk <i>et al.</i> , 2014
$\text{Bi}(\text{S}_2\text{CN}^t\text{Bu}_2)_3$ Bi at (0.3910, 0.836, 0.8604)	$P-1$		PBPY-7	Gowda <i>et al.</i> , 2017
Bi at (0.6600, 0.7342, 0.8780)			$\psi\text{-TPRS-9}$	

Bi at (0.3526, 0.3164, 0.6268)  Bi at (0.6168, 0.2164, 0.6466)		  	$\psi$ -SAPRS-9  PBPY-7	
Bi(S <sub>2</sub> CN <sup>n</sup> Bu <sub>2</sub> ) <sub>3</sub>	$P2_1/n$ , $P2_1/c$		$\psi$ -DD-8	Gowda <i>et al.</i> , 2017; Sun <i>et al.</i> , 2012
Bi(O <sub>2</sub> CPh) <sub>3</sub>  Bi at (0.1629, 0.3068, 0.7174)  Bi at (0.6650, 0.2569, 0.7979)	$P2_1/m$	 	SAPRS-9  $\psi$ -SAPRS-9	Rae <i>et al.</i> , 1998

$\text{Bi}(\text{O}_2\text{CPh})_3$	$R\bar{3}$		TPRS-9	Tumanov <i>et al.</i> , 2010
$\text{Bi}(\text{C}_{10}\text{H}_3\text{O}_8)$	$P\bar{1}$		SAPRS-9	Feyand <i>et al.</i> , 2013
$\text{Bi}(\text{C}_{10}\text{H}_3\text{O}_8)$	$P2_1/a$		SAPRS-9	Feyand <i>et al.</i> , 2013
$\text{Bi}(\text{C}_6\text{H}_4\text{NO}_2)_3$	$P2_1$		TPRS-9	Anjaneyulu & Swamy, 2011 Callens <i>et al.</i> , 2008
$\text{Bi}(\text{C}_6\text{H}_4\text{NO}_2)_3$	$P2_1/n$		SAPRS-9	Anjaneyulu <i>et al.</i> , 2010
$\text{Pb}(\text{C}_2\text{H}_3\text{O}_2)_2$	$P2_1$		$\psi$ -SAPR-8	Martínez-Casado <i>et al.</i> , 2016
$\text{Pb}(\text{C}_2\text{H}_3\text{O}_2)_2$	$P2_1/m$		$\psi$ -DD-8	Martínez-Casado <i>et al.</i> , 2016



$\text{Pb}_2(\text{H}_2\text{O})(\text{C}_{10}\text{H}_{10}\text{O}_5)$ Pb at (0.4549, 0.0386, 0.8012)  Pb at (-0.0002, 0.0821, 1.0736)	$P2_1$		$\Psi\text{-DD-8}$  $\Psi\text{-DD-8}$	Yang <i>et al.</i> , 2011
$\text{Pb}(\text{C}_9\text{H}_{17}\text{O}_2)_2$	$P-1$		$\Psi\text{-DD-8}$	Martínez-Casado <i>et al.</i> , 2017
$\text{Pb}(\text{C}_9\text{H}_{17}\text{O}_2)_2$			$\Psi\text{-PBPY-7}$	Martínez-Casado <i>et al.</i> , 2017
$\text{Pb}(\text{C}_{10}\text{H}_{19}\text{O}_2)_2$	$P-1$		$\Psi\text{-DD-8}$	Martínez-Casado <i>et al.</i> , 2017
$\text{Pb}(\text{C}_{10}\text{H}_{19}\text{O}_2)_2$	$P2_1/c$		$\Psi\text{-PBPY-7}$	Martínez-Casado <i>et al.</i> , 2017

Pb(ClO <sub>4</sub> ) <sub>2</sub> (C <sub>15</sub> H <sub>11</sub> N <sub>3</sub> )	<i>C2/c</i>		Ψ-DD-8	Engelhardt <i>et al.</i> , 1996
Pb(ClO <sub>4</sub> ) <sub>2</sub> (C <sub>15</sub> H <sub>11</sub> N <sub>3</sub> ) Pb at (0.2958, 0.5810, 0.1432)  Pb at (0.1058, 0.4175, 0.0599)  Pb at (0.5000, 0.4166, 0.2500)	<i>C2/c</i>		Ψ-DD-8  Ψ-DD-8  Ψ-DD-8	Blake <i>et al.</i> , 2009

**Current cell**

10.0838(8) 14.4060(11) 17.3284(13) 89.988(6) 80.409(6) 75.158(7) 2396.9(3)

## Lattice reduction

## selected cell

10.0838 14.4060 17.3283 89.9877 80.4084 75.1581 aP 31

## reduced cell

10.0838 14.4060 17.3283 89.9877 80.4084 75.1581 2396.9

## Twin information

1: 10.0843 14.4065 17.3285 89.989 80.409 75.158 2397.1

2: 12.4491 13.5099 14.6928 90.065 99.907 89.996 2434.3

1: Total: 3866( 57.3%) Separate: 3789( 56.2%) Overlapped: 77( 1.1%)

2: Total: 2083( 30.9%) Separate: 2006( 29.7%) Overlapped: 77( 1.1%)

Unindexed: 871 ( 12.9%)

**PEAK TABLE**

## Peak hunting table

UB fit with 3866 obs out of 6743 (total:6743,skipped:0) (57.33%)

**INSTRUMENT MODEL**

## Goniometer

beam: 0.05620 alpha: 50.10981 beta: -0.01496

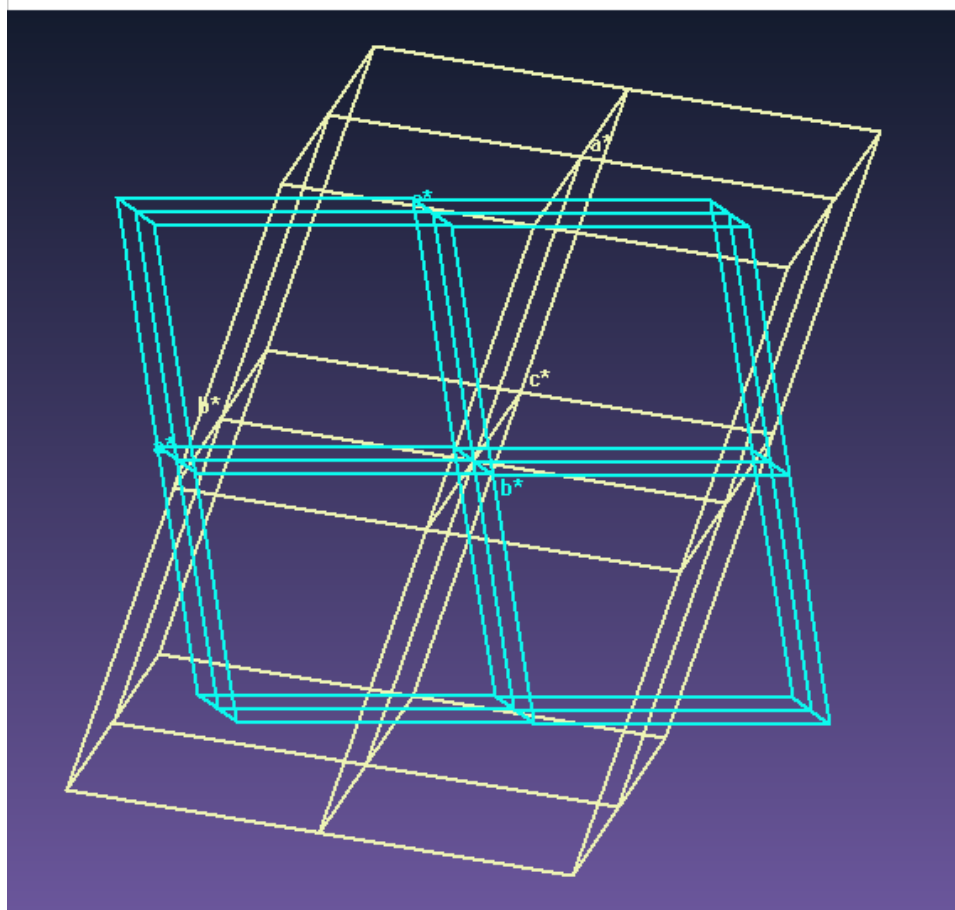
om zero: 0.30814 th zero: 0.11714 ka zero: 0.32714

## Detector

x-rot: 0.24574 y-rot: -0.28630

x-cen: 1022.21618 y-cen: 1035.78307 distance: 75.03628

Wavelength Mo (Ang): A1 0.70930 A2 0.71359 B1 0.63229

**Fig. S1**